VINITED STATES PATENT AND TRADEMARK OFFICE

Filing Date Dec 03, 2001 Inventorship Rui Applicant Microsoft Corporation Attorney's Docket No. MS1-885US Title: Automatic Detection and Tracking of Multiple Individuals Using Multiple

Cues

2

3

4

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

SEP 0 2 2003

Technology Center 2600

INFORMATION DISCLOSURE STATEMENT

References -- See Attached Form PTO-1449

REMARKS

The citations listed, copies attached, are submitted in compliance with the duty of disclosure defined in 37 CFR §1.56. The Examiner is requested to make these citations of official record in this application.

Date: 8/26/03

Respectfully Submitted,

By: Allan T. Sponseller Reg. No. 38,318

+

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet / of

			_
Co	mplete if Knowi	, RECE	MED
Application Number	10/006,927	CED A O	2002
Filing Date	Dec 03, 2001	SEP 0 2	204 3
First Named Inventor	Rui	Tacharda	
Group Art Unit	2621	Technology Ce	mer 260
Examiner Name	JOHNS, AND	REW W	
Attorney Docket Number	MS1-885US		フ

/	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. S. Birchfield, "Elliptical Head Tracking Using Intensity Gradients and Color Histograms", IEEE Conference on Computer Vision and Pattern Recognition, Santa Barbara, California, pp. 232-237, June 1998. M. Brandstein, and H. Silverman, "A Practical Methodology for Speech Source Localization with Microphone Arrays", Computer, Speech, and Language, 39 pages, November 1996. M. Isard and A. Blake, "Condensation - conditional density propagation for visual tracking," International J. Computer Vision, 36 pages, 1998. N. Jojic, M. Turk, and T. Huang, "Tracking Self-Occluding Articulated Objects in Dense Disparity Maps", IEEE International Conference on Computer Vision, Corfu, Greece, 8 pages, September 1999. S.Z. Li, Q.D. Fu, L. Gu, B. Scholkopf, Y.M. Cheng, H.J. Zhang, "Kernel Machine Based Learning for Multi-View Face Detection and Pose Estimation", in Proceedings of 8th IEEE International	T ²
/	Computer Vision and Pattern Recognition, Santa Barbara, California, pp. 232-237, June 1998. M. Brandstein, and H. Silverman, "A Practical Methodology for Speech Source Localization with Microphone Arrays", Computer, Speech, and Language, 39 pages, November 1996. M. Isard and A. Blake, "Condensation - conditional density propagation for visual tracking," International J. Computer Vision, 36 pages, 1998. N. Jojic, M. Turk, and T. Huang, "Tracking Self-Occluding Articulated Objects in Dense Disparity Maps", IEEE International Conference on Computer Vision, Corfu, Greece, 8 pages, September 1999. S.Z. Li, Q.D. Fu, L. Gu, B. Scholkopf, Y.M. Cheng, H.J. Zhang, "Kernel Machine Based Learning for	
/	Microphone Arrays", Computer, Speech, and Language, 39 pages, November 1996. M. Isard and A. Blake, "Condensation - conditional density propagation for visual tracking," International J. Computer Vision, 36 pages, 1998. N. Jojic, M. Turk, and T. Huang, "Tracking Self-Occluding Articulated Objects in Dense Disparity Maps", IEEE International Conference on Computer Vision, Corfu, Greece, 8 pages, September 1999. S.Z. Li, Q.D. Fu, L. Gu, B. Scholkopf, Y.M. Cheng, H.J. Zhang, "Kernel Machine Based Learning for	
	International J. Computer Vision, 36 pages, 1998. N. Jojic, M. Turk, and T. Huang, "Tracking Self-Occluding Articulated Objects in Dense Disparity Maps", IEEE International Conference on Computer Vision, Corfu, Greece, 8 pages, September 1999. S.Z. Li, Q.D. Fu, L. Gu, B. Scholkopf, Y.M. Cheng, H.J. Zhang, "Kernel Machine Based Learning for	
i	Maps", IEEE International Conference on Computer Vision, Corfu, Greece, 8 pages, September 1999. S.Z. Li, Q.D. Fu, L. Gu, B. Scholkopf, Y.M. Cheng, H.J. Zhang, "Kernel Machine Based Learning for	
i	S.Z. Li, Q.D. Fu, L. Gu, B. Scholkopf, Y.M. Cheng, H.J. Zhang, "Kernel Machine Based Learning for	
	Conference on Computer Vision. Vancouver, Canada, 6 pages, July 9-12, 2001.	
	S.Z. Li, Q.D. Fu, L. Gu, B. Scholkopf, Y.M. Cheng, H.J. Zhang, "Kernel Machine Based Learning for Multi-View Face Detection and Pose Estimation", Microsoft Research Technical Report MSR-TR-2001-07, 9 pages, January 2001.	
	Y. Rui, A. Gupta, and J. Cadiz, "Viewing Meetings Captured by an Omni-Directional Camera", Microsoft Research Technical Report MSR-TR-2000-97, 10 pages, September 2000.	
	J. Shi and C. Tomasi, "Good Features to Track", IEEE Conf. on Computer Vision and Pattern Recognition, pp. 593-600, 1994.	
/	C. Stiller and J. Konrad, "Estimating Motion in Image Sequences, A tutorial on modeling and computation of 2D motion", IEEE Signal Processing Magazine, 34 pages, July 1999.	
- 1	H. Tao, H. Sawhney, and R. Kumar, "Dynamic Layer Representation with Applications to Tracking", in Proc. IEEE conf. on Computer vision and Pattern Recognition 2000 (CVPR 2000), vol. 2, pp. 134-141, June 2000.	
	P. H. S. Torr, R. Szeliski, and P. Anandan, "An Integrated Bayesian Approach to Layer Extraction from Image Sequences", IEEE Seventh International Conference on Computer Vision, pp. 983-991, v.2, 1999.	
		C. Stiller and J. Konrad, "Estimating Motion in Image Sequences, A tutorial on modeling and computation of 2D motion", IEEE Signal Processing Magazine, 34 pages, July 1999. H. Tao, H. Sawhney, and R. Kumar, "Dynamic Layer Representation with Applications to Tracking", in Proc. IEEE conf. on Computer vision and Pattern Recognition 2000 (CVPR 2000), vol. 2, pp. 134-141, June 2000. P. H. S. Torr, R. Szeliski, and P. Anandan, "An Integrated Bayesian Approach to Layer Extraction from Image Sequences", IEEE Seventh International Conference on Computer Vision, pp. 983-991,

Examiner	Date	
Signature	 Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box ->	+
,	

		_
REC	E۱	ンユフ

Ali6 2 9 2003 Sheet

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Of

Of

Of

Complete if Known		SEP 0 2 2	เบร
Application Number	10/006,927	<u> </u>	103
Filing Date	Dec 03, 2001	Technology Con	4. 26nr
First Named Inventor	Rui	Toomology Och	CI LUUU
Group Art Unit	2621		
Examiner Name	JOHNS, ANDR	REW W	
Attorney Docket Number	MS1-885US		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	1	N. Vasconcelos and A. Lippman, "Empirical Bayesian EM-based Motion Segmentation", Proc. Of IEEE conference on Computer Vision and Pattern Recognition, pp. 527-532, Puerto Rico, 1997.	
		P. Viola and M.J. Jones, "Robust Real-time Object Detection", Technical Report Series, Compaq Cambridge Research Laboratory, CXRL 2001/01, 29 pages, February 2001.	
		P. Viola and M.J. Jones, "Robust Real-time Object Detection", 2nd International Workshop on Statistical and Computational Theories of Vision - Modeling, Learning, Computing, and Sampling, Vancouver, Canada, 25 pages, July 2001.	
		H. Wang and P. Chu, "Voice Source Localization for Automatic Camera Pointing System in Videoconferencing", ICASSP '97 (1997 International Conference on Acoustics, Speech and Signal Processing), pp. 187-190, 1997.	
		C. Wren, A. Azarbayejani, T. Darrell, and A. Pentland, "Pfinder: Real-Time Tracking of the Human Body", IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 19, no. 7, pp. 780-785, July 1997.	
		D. Comaniciu, V. Ramesh, and P. Meer, "Real-Time Tracking of Non-Rigid Objects using Mean Shift", IEEE Conf. Computer Vision and Pattern Recognition, Vol. 2, pp. 142-149, 2000.	
·			
_			_
			L

Examiner	Date	
Signature	Considered	

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.